TO FIGHT THE CHOLERA

FOR QUARANTINE AND MARINE HOSPITAL SERVICE.

Danger that Cholera May Come—What Must Be Done to Prevent the Epidemic from Reaching Our Shores—Legislation to Check Immigration.

The Scourge and the Fair.

Will the cholera invade the United States in '93 to decimate our population and play havoc with the World's Fair? Can it be kept out altogether, or will it be allowed to get a foothold and exceed the distressing experiences of last summer? What safeguards can be provided, and what means will be the most effective? These are the questions uppermost in the public mind.

Various precautionary measures are suggested, and it will be strange indeed if, out of the abundance of ideas offered and experience brought to bear, some adequate system is not evolved speedily for the protection of the nation from the dreaded scourge. The British Government has determined to appoint a cholera survey with a view to preparing for the impending epidemic. Overwhelming pressure is now being exerted upon Congress from every section of this country to do its duty in the same regard, and it seems almost certain that a wise measure, comprehensive enough to meet all the requirements of the situation, will be framed and agreed upon. With ample precautions by the United States Government, under a thorough and uniform system and intelligent administration, so our official sanitary authorities say, there is a chance of keeping the cholera out, but without sufficient provision to meet and fight it the danger of its reappearance in virulent form is exceedingly imminent.

From present indications it would appear to be a foregone conclusion that whatever system may be agreed upon the present organization of the Marine Hospital service and Federal quarantine will be made its nucleus and basis, around which all necessary amplifications can be grouped and upon which all needful superstructures can be built. In the absence of any specific legislation to the contrary, the task of protecting the country will fall upon the present Federal quarantine service.

The Federal quarantine service is but imperfectly understood and appreciated throughout the country, and considerable irritation has resulted in consequence between it and certain local quarantine boards. The Federal quarantine and Marine Hospital Service were founded by law as far back as 1798 and 1799, and have been from time to time gradually extended since. The original Marine Hospital service was designed for the care of sick and disabled seamen at points remote from their homes. In 1871 it was reorganized and placed upon its present footing as a bureau of the Treasury Department. The old quarantine statute of 1799 provided for the observance of State health regulations by Federal officers, and gave the President of the United States the power to purchase or erect quarantine warehouses and to remove certain branches of the government to places of safety during epidemics of contagious diseases. By the law of 1878, to prevent the introduction of contagious and infectious diseases, vessels arriving from infected foreign ports are to be kept out, United States Consuls are required to report the state of health at such ports and to notify the Marine Hospital Service of the departure of infected vessels, and officers of State quarantine are empowered to act in emergencies as officers of the national quarantine.

HEADQUARTERS MARINE HOSPITAL SERVICE

QUARANTINE STATIONS.

In this way the marine hospital service and the Federal quarantine were linked together. A National Board of Health was created in 1879, with limited duties and prerogatives, but by the refusal of Congress subsequently to provide for its expenses it ceased to have an active existence. By the act of 1888 eight Federal quarantine stations were established and placed under the control of the marine hospital service. All of them are now in active operation. The stations themselves and the ramified services connected with them form the Federal safeguards which the United States Government possesses against foreign infection at this time. The headquarters of the service are in Washington, D. C., in what is known as the "Butler" building, an imposing granite structure recently purchased by the Government, directly facing the Capitol on the south. There is the nerve center of the entire Federal quarantine and marine hospital service. From this building emanate all orders regarding the movements of quarantine vessels and the operations of the several stations, and there the whole intricate machinery of the system is supervised and manipulated.

DISINFECTING STEAMER JAMOA.

National and State Services.

The assumption is common that there is no distinctive Federal quarantine law, but this arises out of the comparative incompleteness of the present system and [illegible] the Federal and State regulations and the methods of their execution. The growing tendency toward centralization carries with it the idea and purpose of making the national system paramount and independent of the State systems. The law of 1878, it is true, gives extensive quarantine powers to the marine hospital service, but these powers are restricted by a proviso that the national quarantine regulations must not interfere with the State and local quarantines. There is nothing in this proviso, however, to prevent the General Government from exercising even greater quarantine restraints than the States may impose, the principle being that while the States may erect a ten-foot barrier of defense the United States may add to it five feet more if necessary.

QUARANTINE STATION, ANGEL ISLAND, CAL.

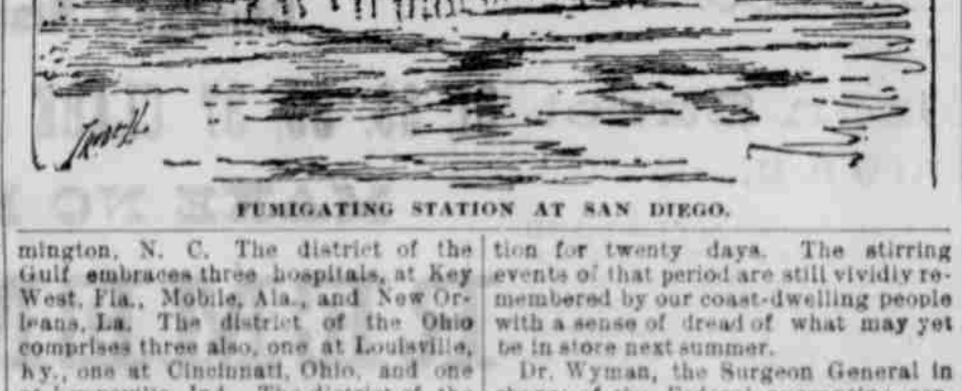
Of the eight Federal quarantine stations already established one is located at Cape Charles, with hospital at Fisherman's Island, Va.; another is located at the Delaware breakwater, with hospital near Lewes, Del.; another, the South Atlantic quarantine, is on Sapolo sound, with hospital at Blackbeard's Island, Ga.; still another, the Key West quarantine, with hospital attachment, is on Dry Tortugas Island, Fla., occupying old Fort Jefferson; the fifth, called the Gulf quarantine, is on the Chandeleur Islands, twenty-three miles off the coast of Mississippi, with hospital on North Chandeleur Island, La.; the sixth is the San Francisco quarantine, the finest in the world, at Angel Island, Cal.; the seventh is at San Diego, Cal.; and the eighth and last one is at Port Townsend, Wash.

GULF STATION, CHANDELEUR ISLAND, MISS.

Ports Protected.

The Cape Charles quarantine protects the cities and towns on the Chesapeake Bay and its tributaries, including the cities of Norfolk, Richmond and Hampton, Va., together with Washington and Baltimore. The Delaware breakwater quarantine protects Philadelphia and Chester, Pa., Camden, N. J., and Wilmington, New Castle and Lewes, Del. The South Atlantic and Key West quarantines protect the southern coast; the Gulf quarantine the ports from Florida to Texas; the Port Townsend and San Francisco quarantines the upper Pacific coast, where there is danger of cholera from China and Japan; and the San Diego quarantine the lower Pacific coast, which must be guarded against infection from the ports of South and Central America and the Southern Pacific Islands.

The marine hospitals proper, which can be utilized in the treatment of isolated cases of cholera inland, are nineteen in number, grouped into eight separate geographical districts. The North Atlantic district includes three hospitals, located, respectively, at Boston, Mass., Portland, Me., and Vineyard Haven, Mass. The middle Atlantic district contains only one hospital, that on Staten Island, N. Y. The South Atlantic district includes two, one at Baltimore, Md., and one at Wilmington, N. C. The district of the Gulf embraces three hospitals, at Key West, Fla., Mobile, Ala., and New Orleans, La. The district of the Ohio comprises three also, one at Louisville, Ky., one at Cincinnati, Ohio, and one at Evansville, Ind. The district of the Mississippi likewise includes three, namely, at St. Louis, Mo., Memphis, Tenn., and Cairo, Ill. Then, there is the district of the great lakes, with hospitals at Chicago, Ill., and Detroit, Mich., and, lastly, the district of the Pacific, with hospitals at San Francisco and Fort Townsend, Wash. In addition to the regularly established quarantine plants are the improvised camp at Fort Pulaski, at the mouth of the Savannah River, Ga., and Camp Low, outside of New York, of last summer's bitter memory.



FUMIGATING STATION AT SAN DIEGO.

The Quarantine Fleet.

The quarantine service has at its disposal a fleet of six finely equipped vessels. Four are disinfecting steamers—the Pasteur, the Hubert Koch, the Welch and the George M. Sternberg, fitted with sulphur furnaces, tanks and other apparatus for fumigation. The other two are superb sea-going steamers—the Dagmar and the Charles Foster. The Dagmar is on duty at the Delaware breakwater and the Charles Foster is at the Cape Charles quarantine.

The quarantine process employed by the marine hospital service consists of: First, overhauling suspected vessels, their inspection, detention, and fumigation, the disinfection of passengers, baggage or cargo, and the transfer of sick persons to the quarantine hospitals and immuring of suspects in barracks. The fumigating act prescribed by the Treasury Department is performed with chloride of mercury, sulphurous oxide and steam heat, together with cleansing and flushing with sea water. Not only are cargoes subjected to this disinfection, but baggage and personal effects, and also the persons of certain classes of suspects. The proper vessels, lighters, launches, buildings, piers, wharves, and appliances for this work are provided at all the established quarantine stations.

Anticipating Invasion.

Last summer's cholera excitement was the first experience our national quarantine service has had with a foreign infection in epidemic form since the memorable yellow fever visitation of 1878. It is not known to the world, but nevertheless it is a fact, that the marine hospital service foresaw the cholera invasion and prepared to meet it as far ahead as October, 1891, when the pestilence prevailed only in Asiatic Turkey. Steps were taken then at the ports of Marseilles and Ghent, where rags were transhipped from the infected territory for export to America, to prosecute, through our consuls, a rigid disinfection. But irrepressible commercial interests, conflicts of authority and jurisdiction and want of coherence in the quarantine regulations prevented absolute thoroughness in this work, so that when, in July and August last, the pest invaded our own shores the quarantine authorities were obliged to put forth the most strenuous exertions to secure in this country only a partial escape from the scourge that then afflicted France, Austria and Germany, notably Hamburg; and they would not have been even thus partially successful had not the President issued his proclamation suspending all immigration for twenty days. The stirring events of that period are still vividly remembered by our coast-dwelling people with a sense of dread of what may yet be in store next summer.

FUMIGATING WHARF, DRY TORTUGAS.

Dr. Wyman, the Surgeon General in charge of the Federal quarantine service, is of the opinion that a mighty battle will have to be waged throughout the coming spring and summer against the foreign enemy.

THE DAGMAR AT DELAWARE BREAKWATER.

The opinions of Dr. Wyman and all other sanitary experts could be put thus in a dozen syllables: With proper precautions, comparative safety; without them, the gravest danger and a [illegible].

SIBERIA NOT A DESERT.

Its Valleys as Fertile as Those of Western America—Great Railroad System.

Siberia, coupled as its name is with stories of Russian barbarity, is not the barren, terrible land of limitless deserts which fiction and the drama have pictured it. The building of the trans-Siberian railway and the extension of lines along the northern frontier of China will greatly change the entire drama of civilization. The railroad from Vladivostock to the Ural Mountains will bring that great Russian naval station within fourteen days' journey of St. Petersburg, and along this route stations will rapidly grow into towns and offer opportunities for new and striking development.

Russia's enterprise, says the Hartford Globe, stimulates that of China, not only as a matter of competitive ambition but for strategic reasons. The railways now being surveyed and completed within the Celestial Empire are numerous, and to this end many foreign engineers are employed. Soldiers and convicts are largely employed as workmen, thus cheapening the cost of labor as far as possible. The trans-Siberian railway extends to a length of nearly 5,000 miles, and it is expected to cost $200,000,000. It is divided into six sections, each section comprising three or more divisions, and the contracts for building is given to these, thus employing a large number of contractors for limited distances.

It is a mistake to suppose that Siberia is a desert, or a glacier, or a mountain fastness, or incapable of being made habitable. The valleys are level plains, and said to be as fertile as the western portion of the United States, and it is not unlike the West in the variety of its resources—in minerals, timbers and in agricultural facilities. It is a marvelous treasure-trove of stored-up opportunities. Its wealth is practically unlimited. With the advantages of railroad communication and telegraph lines, a vast country is added to the world of civilization. The cultivation of the land and the introduction of all the elaborate machinery of enlightened life will, as scientists depict, modify the rigors of the climate, although in Southern Siberia even this obstacle does not exist.

Days of Small Things.

Long before the Revolution a young printer in Philadelphia, when he had taken off his working apron at night, used to sit poring over his dozen of old volumes by firelight. He soon knew them by heart, and hungered for more. But books were costly, and he had but little money.

He had eight or ten cronies—young men who, like himself, were eager for knowledge. Ranging his books on a shelf, he invited his friends to do the same, that each of them might have the benefit of them all.

Ben Franklin thus laid the foundation of the first circulating library, and now one of the largest in this country.

Thirty years ago a kindly German pastor, moved to pity by the condition of the homeless orphans in the city in which he lived, took three of them into his own home, appealing to Christians for aid to feed and clothe them, and to educate them into useful, good citizens.

Three great orphan asylums in different cities of the West are the result of this little effort.

A good woman in Philadelphia, twenty odd years ago, asked two or three of her friends to join her in renting a little room where they could meet occasionally to drink a cup of tea, and consult together how to help other women whose lot in the world was harder than their own.

Out of that little room has grown the stately New Century Club with its collateral Guilds, Classes and Clubs of workingwomen, which have helped and strengthened many thousands.

Many readers who live in inland towns are bewildered when they visit the cities by the great libraries, hospitals, associations for charity, education or mutual aid, and wish hopelessly they had the same helps to broader and higher life in their own homes.

Let them begin with a little effort, and persist in their good work. Some good will come from every attempt of this kind. The most firmly grounded institutions are those which grew out of poverty slowly, and were not built to order.—Youth's Companion.

How Words Change.

Language is the result of ages of growth. Word after word has been added to the previous stock—some of them new inventions, as new things have been discovered or brought into use, others but perversions or variations of terms already familiar. The process of word-making and word-transformation has been carried on, not by scholars only, but by the common people, with the natural result that many words have curious histories. As a writer in Chambers' Journal remarks, "People must have words which they can understand and recall," and they are not scrupulous as to the means by which they obtain them.

Take the common word "titmouse," a chickadee. The first syllable means something small, and the two together ought to mean a little mouse. But the word was formerly "titmose," "mose" meaning a little bird. Somebody—there is no knowing who—changed the name to "titmouse." The new form tickled the popular ear by and by it was generally accepted; then the old and true form went out of use altogether, and the plural, which ought to be "titmoses," became "titmice."

Long ago when a certain article made of sturgeons' bladders came to be sold in England, it was known by its Dutch name "huizenblas," that is, "sturgeon-bladder." The term was a meaningless one to English ears, and by some means or other was transformed into the word which we all know, "isinglass." The change was precisely like that which in some quarters has turned "asparagus" into "sparrow-grass."

In the same manner the old word "berfry," which means simply a watch-tower, was transformed into "belfry." It became the custom to hang bells in such towers, and by common consent a change of spelling followed.

What is the derivation of the word "steelyard"? Most readers would reply without hesitation that it must have been invented as the name of a certain familiar instrument for weighing, an instrument made of steel, and about three feet in length.

In point of fact, however, the word meant in the beginning nothing but the yard, or court, in London, where the continental traders sold their steel. In this yard, of course, there was some kind of balance for weighing the metal—a steel-yard balance.

Language is full of such cases. "Blindfold" has nothing to do with the act of folding something over the eyes, but is "blindfelled," or struck blind. "Buttery" has no connection with butter, but is, or was, a "bottlery," a place for bottles.

A "blunderbuss" was not an awkward or inefficient weapon, but on the contrary was so terrible as to be called a "donderbus," that is to say, a "thunderbox" or "thunder-barrel." The advance in the art of war is happily—or unhappily—typified by the fact that a weapon once so terrible has become an object of ridicule. Will the world ever find our present iron-clads and mortars nothing but things to laugh at?

Enemies of the Diver.

The diver, as the reader may imagine, gets many scares when below. A fifteen-foot shark, magnified by the water, and making a bee-line for one, is sufficient to make the strongest heart quake, in spite of the assertion that sharks have never been known to attack a man in dress. Neither is the sight of a large turtle comforting when one does not know exactly what it is, and the coiling of a sea snake around one's legs, although it has only one's hands to bite at, is, to say the least, unpleasant. A little fish called the stonefish is one of the enemies of the diver, continues a writer in the Century. It seems to make its habitation right under the pearl shell, as it is only when picking them up that any one has been known to have been bitten. I remember well the first time I was bitten by this spiteful member of the finny tribe. I dropped my bag of shells, and hastened to the surface; but, in this short space of time, my hand and arm had so swollen that it was with difficulty I could get the dress off, being unable to work for three days, and suffering intense pain the while. Afterward I learned that staying down a couple of hours after a bite will stop any further discomfort, the pressure of water causing much bleeding of the bitten part, and thus expelling the poison.

One of the strange effects that diving has upon those who practice it is the inevitable bad temper felt while working at the bottom; as this irritability passes away as soon as the surface is reached again, it is only reasonable to suppose that it is caused by the unusual pressure of the air inside the dress, affecting probably the lungs, and through them the brain. My experience has been that while below one may fly into the most violent passion at the merest trifle, for instance, the life-line held too tight or too slack, too much air or too little, or some imaginary wrong-doing on the part of the tender or the boys above, will often cause the temper to rise. I have sometimes become so angry in a similar way that I have given the signal to pull up, with the express intention of knocking the heads off the entire crew; but as the surface was neared and the weight of air decreased my feelings have gradually undergone a change for the better, until by the time I had reached the ladder and had the face glass unscrewed I had forgotten for what I came up.

Servant Has the Best of It.

An investigation which has been prosecuted by the British Royal Labor Commission indicates that in England the servant is far better off in regard to facilities for local redress than is the employer, and that legislation would not bring these two classes closer together.

Light Mortality.

Vienna papers are commenting proudly upon the extraordinary healthfulness of Olmutz, a city of 21,000 inhabitants, but one of whom died in the twenty-four days following Oct. 17. The undertakers are not joining in the jubilee to any extent.

Gee Whiz!

Electricity, where unretarded by atmospheric influences, travels at the rate of 288,000 miles a second. Along a wire it is, of course, vastly slower; a perceptible period of time is occupied by the electric current in sending telegrams over long distances.

A Noble Remnant.

Only eight of the 69,000 Frenchmen who fought under Napoleon at Waterloo are now alive and in France.

May They All be Lucky.

The members of a club of rich young men in Venice are pledged to marry poor girls.

What a Difference!

Away back in the year 1813 eggs sold in London at 1 penny for two dozen.

A SPOUTING ROCK.

A Salt Water Ocean Geyser at Santa Cruz.

One of the strangest things to be seen at Santa Cruz these days, says the San Francisco Examiner, is a rock through which the sea water boils and bubbles furiously. The spouting rock was developed during the recent great storm. Every two or three minutes, alternately, a volume of water sixty feet high shoots into the air.

THE OCEAN GEYSER.

To view it wholly from the surface it appears to be a gigantic geyser, compared with which those of the Yellowstone Park are at times insignificant. The phenomenon is explained easily. The constant action of the breakers has worn a tunnel through the soft rock from the ocean to the top of the cliff, and the power of rushing waves forces the water in it to the surface with a sound like the roar of artillery.

Pilatre de Rozier.

The first aeronaut who fell victim to his desire of exploiting the upper air was Pilatre de Rozier who, a few months after the balloon had been invented, declared his purpose of ascending in one and allowing it to take him whither it would. The French king, however, frowned upon the project, and sent Pilatre word that the experiment should be made by sending up two condemned criminals. But Pilatre indignantly refused this offer. "What!" said he, "shall vile criminals have the glory of being the first to navigate the fields of air? Never, while Pilatre de Rozier draws breath!"

He agitated the subject until the entire court became interested in his favor, and then, at last, the King yielded, and Pilatre, in November, 1783, made a perfectly successful ascent. Benjamin Franklin was a witness of the spectacle, and said, when some one asked his opinion of it, "I have seen a child born which may one day be a man."

Two years after, another aeronaut crossed the Channel from Dover to Calais, and Pilatre, spurred on by jealousy, declared his purpose of crossing it in the opposite direction.

His friends endeavored to dissuade him from the project, believing that the machine had not been sufficiently perfected, but nothing could calm his enthusiasm.

In June a balloon was ready, but it may easily be seen that Pilatre was not very confident of success, since he pushed back an army officer who would have stepped into the car with him, saying, gently:

"Monsieur, in our present enterprise we are sure of nothing. I cannot accept you, if I would have my conscience at peace."

The balloon rose majestically and tended at once toward the sea. Presently it turned, but again drifted back in the direction of the water. Then it is probable that Pilatre endeavored to descend, in order to reach a more favorable current of air, but in opening the valve, according to one account, he unfortunately made a rent in the balloon itself. Instantly he was dashed to the ground, a distance of several thousand feet, and was found there, dead and frightfully mutilated.

He is still one of the heroes of France, and an inscription to his memory may be read on the spot where he made his fatal attempt.

Other People's Eyes.

While a due regard for the opinions and convictions of other people is a saving grace of life, there is no greater mistake than to habitually contemplate one's friends or acquaintances through the eyes of other people. With regard to events the case is quite different. A fact is a fact. An occurrence is largely a fixed and definite thing, and capable only of giving a rather definite impression. But the individual is relative. As a musical instrument gives out one degree of harmony or another, or even discord, according to the touch and skill of the player without changing its essential character at all, so in a far greater way does the individual reveal one set of qualities or another, or different aspects of the same quality, according to the person with whom he converses or with whom he acts. Character in its fundamental basis is not fluctuating. The honest man does not become dishonest, nor the truthful man false, according to the company he is with; but in all the range of matters pertaining to harmony of temperament—and that includes many salient qualities—one is to some extent what he is made by his associates, and so, to keep the true focal vision, one must keep his own.

You have found So-and-so to be especially invigorating and helpful in influence, and remarking this to your neighbor, you are told that he is, instead, dictatorial and trying. Which is the truer, or even the true view? The probabilities are that each is true to the individual who sees it, for manifestations of character are relative, and depend on the action and reaction of temperament.

SIR WILLIAM VERNON HARCOURT must be awarded whatever praise is due for his invention of the [illegible] name of the "Grand Old Man."